1:Gurdon E-4, 5 (no date) 1907 AR7 Khasi AR7

when fire is applied, logs of wood being placed at intervals of a few feet to prevent as far as possible the ashes being blown away by the wind. The lands are not hoed, nor treated any further, paddy and millet being sown broadcast, and the seeds of root crops, as well as of maize and Job's tears, being dibbled into the ground by means of small hoes. No manure, beyond the wood ashes above mentioned, is used on this class of land; there is no irrigation, and no other system of watering is resorted to. The seeds are sown generally when the first rain falls. This style of cultivation, or *jhum*, is largely resorted to by the people inhabiting the eastern and southern portions of the Jaintia Hills, e.g. the Bhois and Lalungs, the Lynngams and Garos of the western tracts of the district. Wet paddy land (*hali* or *pynthor*) is, as the name implies, the land where the kind of paddy which requires a great deal of water is grown. The bottoms of valleys are divided up into little compartments by means of fairly high banks corresponding to the Assamese *ális*, and the water is let in at will into these compartments by means of skilfully contrived irrigation channels, sometimes a mile or more in length. The soil is made into a thick paste in the Jaintia Hills by means of the plough, and in the Khasi Hills through the agency of the hoe. Droves of cattle also are driven repeatedly over the paddy-fields until the mud has acquired the right consistency. The seed is then sown broadcast in the wet mud. It is not sown first in a seedling bed and then transplanted, as in Assam and Bengal. When the plants have grown to a height of about four inches, water is let in again; then comes the weeding, which has to be done several times. When the crop is ripe, the ears are cut with a sickle (*ka rashi*) generally, so as to leave almost the entire stalk, and are left in different parts of the field. A peculiarity about the Lynngam and the Khasis and Mikirs of the low hills, or Bhois as they are called, is that they reckon it *sang*, or taboo, to use the sickle. They reap their grain by pulling the ear through the hand. The sheaves, after they are dry, are collected and thrashed out on the spot, either by beating them against a stone (*shoh kha*), or by men and women treading them out (*iuh kha*). Cattle are not used for treading out the grain. The grain is then collected and placed in large bamboo receptacles

mould. The plant[1] is watered by means of small bamboo aqueducts which are constructed along the hill-sides, the water being conducted along them often considerable distances. As in the plains, the leaves of the *pán* creeper are collected throughout the year.

The bay leaf (*'la tyrpád*, or *tezpát*) is classified in the *Agricultural Bulletin* as *Cinnamomum tamala*, and there is a note in the column of remarks that "this tree, as well as one or two others of the same genus, yields two distinct products, *tezpát* (bay leaf) and cinnamon bark." The bay leaf is gathered for export from the extensive gardens in Maharam, Malaisohmat, Mawsynram, and other Khasi States. The plants are raised from seed, although there are no regular nurseries, the young seedlings being transplanted from the jungle, where they have germinated, to regular gardens. Bay leaf gardens are cleared of jungle and weeds periodically; otherwise no care is taken of them. The leaf-gathering season is from November to March. The leaves are allowed to dry for a day or two in the sun, and then packed in large baskets for export. The gathering of bay leaf begins when the trees are about four years old.

The following are the other minor crops which are grown in the Khasi and Jaintia Hills:—

Pineapples, turmeric, ginger, pumpkins and gourds, the egg plant, chillies, sesamum, and a little sugar-cane. The arum* (*ka shiriw*) is also extensively grown in the hills, and forms one of the principal articles of food amongst the poorer classes; it is generally raised in rotation with potatoes, or is planted along with Job's tears. The stem of the arum is sometimes used as a vegetable, also for feeding pigs.

In the Jowai Sub-Division, notably at Nartiang, there are fairly good mangoes, which are more free from worms than those grown in the plains of Assam.

The Bhois and Lynngams cultivate lac. They plant *arhar dal*, *u landoo*, in their fields, and rear the lac insect on this plant. Last year the price of lac at Gauhati and Palasbari markets rose as high as Rs. 50 per maund of 82 lbs., it is said, but the price at the outlying markets of Singra and Boko was

* Colocasia esculenta, Beng. *Kachu*.

[1] [i.e., the pán ---- Analyst]

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327 Colonel Lister, writing in 1853, estimated that 20,000 maunds
439 of iron were exported from the hills in the shape of hoes to
412 the Assam Valley, and in lumps of pig iron to the Surma Valley, where it was used by boat-builders for clamps. Nowadays the smelting of iron is carried on in very few places. There are still smelting-houses at Nongkrem and Nongsprung, but these are practically the only places left where smelting of iron ore goes on; there are many forges where rough iron brought from the plains is melted down and forged into bill-hooks and hoes. Messrs. Yule and Cracroft have described the
113 native process of smelting iron, and it is only necessary to refer
114 to their papers if information is required on the subject. Yule's
327 account is a very full one, and is to be found at page 853, vol. xi. part ii. of the Journal of the Asiatic Society of Bengal. The system pursued, both in the extraction and in the subsequent smelting of the ore, is the same at the present day as that
327 described by Yule. Dr. Oldham, writing in 1863, says, "The quality of this Khasi iron is excellent for all such purposes as Swedish iron is now used for. The impurity of the blooms (or masses of the metal in a molten state), however, as they are sent to market, is a great objection to its use, and the waste consequent thereon renders it expensive. It would also form steel or wootz (Indian steel) of excellent quality. I have no doubt that the manufacture could be greatly improved and possibly extended." Dr. Oldham, however, goes on to remark that the manufacture of iron could not be very much extended, owing to the scanty dissemination of the ore in the rocks, and
• [312] the consequent high cost of obtaining it. At present the want of any permanent supply of water prevents the natives from working for more than a few days during the year, whilst the rains are heavy, and they can readily obtain sufficient force of water for the washing of the ore from its matrix. The export of iron in any form from the district has now almost died out, only a few hoes being brought down by the Khasis from Laitdom, in Khadsawphra, to the Burdwar and Palasbari markets in the Kamrup District of the Assam Valley. Iron of English manufacture has, of course, much cheapened the market, but probably the fact that the parts of the country in the neighbourhood of the rocks which contain the metal have

thereafter, the British negotiated treaties with all the Khasi states, the last treaty being signed in 1862. It was contracted that the chiefs would be subject to the authority of a resident political agent, whose duties would involve maintaining law and order, judging cases of heinous crimes, approving the popular selection of any new chief, and exercising control over certain categories of natural resources. Khasis were guaranteed noninterference in their customary way of life, and they were not then, nor are they now, taxed. Most Khasis, as opposed to Jaintias, were never an integral part of British India, but they did undergo social change as a result of British presence. To summarize Mills (n.d.): (1) The British introduced the potato, which the Khasis rapidly took up as a cash crop for marketing as far as Calcutta. The intensive specialization exhausted the soil and made for ever-poorer crops. (2) Christian missionaries made large numbers of converts, and there arose the difficult question of whether a Christian should inherit property that traditionally was earmarked for her performance of non-Christian religious rituals. (3) About 1864 the British transferred their headquarters from Cherrapunji to Shillong. When they made Shillong the capital of the entire state of Assam, non-Khasis flocked to it, land values soared, and the concept of private property became increasingly important. Khasis began to marry with members of other ethnic groups, which introduced confusion into traditional social patterns. These problems were exacerbated during World War II, when Shillong and its environs enjoyed enormous economic prosperity. One notable aftermath of this affluence has been the accelerated enrollments in schools and colleges. Hundreds of Khasis now have the B.A., M.A., and even the Ph.D. degree. • With the Independence of India in 1947, and under the Sixth Schedule of the Constitution of India (which was drafted by a Khasi), the United Khasi–Jaintia Hills District became a Part B, or Autonomous, Tribal Area, to be governed by a District Council composed largely of Khasis and Jaintias, and responsible not to the Legislature of Assam, but to the Governor of Assam as agent of the President of India. The native-state system and the chiefs still exist, and the District Council finds it difficult to effect legislation which is neither offensive to regional custom nor a simple blueprint of ill-fitting all-India legislation. The major political schism at this time is between Jaintias, who are accustomed to centralized authority and taxation, and Khasis, who resist the notion of taxation to support the work of a central District Council. [Cf. Gait 1926; Aitchison 1931; Bhuyan 1949; Morris 1910.]

175 619 648 [726] [651] [177] 177 648 244 439 134 797 428 635 633 167 563 423 [973] 648 642 [651] [563] [113]

SETTLEMENT PATTERN AND HOUSING. Settlement pattern. Khasis live sedentarily in named, nucleated, and unplanned villages which are situated just below hill summits to avoid strong winds but still be defensible, and which usually include a de-

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435 659 Regarding supply of foodgrains through fair price shops, the position appeared to be unsatisfactory. Complaints were heard from some villagers coming from the interior villages that they very rarely get rice from fair price shops, which are usually allotted to bigger villages, sometimes too far from the villages tagged to it. Even the people of the villages where there were fair price shops, complained that the supply of rice to these shops was inadequate and the price also was very high which in some areas was even as high as Rs. 31·00 per maund.

164 312 In a majority of the villages investigated, water supply and medical facilities were not satisfactory. Malaria, dysentery and other bowel diseases are common in this area.

743 The table above clearly shows that the medical facilities obtainable in these villages are far from satisfactory. Only 6 villages out of 28 villages have a dispensary either located in the village or within a radius of five miles. Considering the lack of communication facilities and the hilly nature of the district even five miles is often too long a distance for a patient to go to the doctor or for a doctor to attend a patient. When the doctor has to cover long distances the charges become too high. As a result the poorer sections in case of serious illness have to approach unqualified medical men when one is available or otherwise to depend upon the mercy of God. Even for quinine and other cheap medicines one has to go to a dispensary or a private medical practitioner miles away. Reportedly, the more disheartening fact is that the medical help received by the people from Government dispensaries are not often timely and adequate due to non-availability of a doctor and in-adequacy of stock of medicines.

361 364 4.4 **Sanitation.**—Though conditions of housing, sanitations, etc., of the villages are described in village notes in the appendix, it will be pertinent to make some general observations on the point. Unlike other hill tribes, the Khasis select their house sites on the hill slopes and level lands by the side of the hills as a protection from winds. From the fact that the villages are situated in the slopes one might be tempted to think that the sanitary and drainage system of the villages should be quite satisfactory. But in fact it is otherwise in many cases particularly in the case of big villages where too many families huddle up constructing their houses very close to each other thus practically converting the village into a slum. Many of the villages, due to their very location in groves surrounded by thick jungles do not get sufficient sun-light and as a result always remain damp, facilitating frequent incidence of cold and influenza. People answer the call of nature in jungles and bushes in and around the villages. Many of the villages are built on level lands full of swamps, mud and tall weeds, places which provide good breeding place for mosquitoes. Cowsheds and pig sties are built close to the residential quarters which make the villages all the more dirty. Indeed, there are villages enjoying excellent sanitation and health but in majority of the villages there remains a lot to be done for improving the sanitary, drainage systems for educating the people to make their villages more hygienic. From the Government side also, elaborate measures should be adopted to combat and eradicate malaria which is still causing [312] havoc in the district. Similarly, drinking water supply schemes should receive a high priority in a programme of development.

342 4.5 **Housing.**—Majority of the houses in the interior areas are made of thatch and bamboo with wooden planking or stone or earthen floor. Walls are plastered with mud. In higher altitudes houses are lowly roofed presumably as a protection against wind and heavy rain. Some of these houses assume the shape of a half buried cylinder. They generally have only one opening through the main door, though some of them have another in their rear end. They generally contain only two small rooms. One who is not used to such conditions wonders how the inmates, especially when there are five or six of them, could feel comfortable. Houses of the well-to-do people particularly those on the road side, are built in the modern style with C.I. roofing, plank floor, mud plastered, whitewashed

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133 they form rapids, the waters precipitating themselves down deep, rocky gorges and chasms, choked with huge boulders. Some of these gorges are very beautiful; the streams, being hemmed in between stupendous mountains and rocks covered with primeval forest, run in narrow but very deep channels swarming with fish. No islands or lakes are formed by any of the rivers, although several of them have large, deep pools. They are all unfordable during the rains.

312 UTILIZATION OF THE WATER SUPPLY.—None of the rivers are utilized as a motive power for turning machinery, although the streams on the higher plateaux might be easily turned to such an account. Their waters, however, are extensively used for the purposes of irrigation, and the hill people display great ingenuity in cutting channels or aqueducts for leading the water on to their [365] fields. It is in this manner that the Civil Station of Shillong receives its water supply. Aqueducts convey water to the houses of all the European residents; and branch channels from the main aqueduct flow through the *bázár*, and along the streets occupied [226] by the native inhabitants. No fishing towns exist in the hills; but [563] near where the rivers debouch upon the plain are some valuable fisheries, which are annually let in farm, the lessees being generally Bengálís. These fisheries yield an annual Government revenue of about £300. Embankments in order to protect the land against floods do not exist. A few embankments, or rather dams, are thrown across narrow valleys between hills, so as to create reservoirs for water. At Shillong there are a few tanks thus formed, which are both useful and ornamental.

135 MINERALS, ETC.—Coal and limestone, both of excellent quality, are found in abundance. Lower Bengal obtains nearly the whole of its lime supply from the Khásí and Jáintiá Hills. The lime is known as 'Sylhet lime,' and is obtained by quarrying from the beds of stone which line the base of the mountains along the whole length of the Sylhet boundary. The supply is literally inexhaustible. Coal out-crops at Cherrá Púnjí, Lá-ká-dong, Shellá, Máo-syn-rám, and at several other places; but as a rule it is scattered, and found in places difficult of access. The coal, however, is of excellent quality, and leaves very little ash. Stone, well adapted for building purposes, is also found. Ironstone exists almost everywhere throughout the Hills, but principally in the dependent States of Khyrim, Nongspung, Cherrá, and Mylliem. In former years the Khásiás were

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extent of waste land, some is cultivated in a manner resembling the *jûm* system,—successive crops are grown on a patch of land till the soil is exhausted, and then another spot is selected, where the same process is repeated afresh, but without anything that can be called a *jûmiâ* tenure. Any renting of land is exceptional, and there are no recognised rates of rent. The Deputy-Commissioner, however, states that an ordinary rate for rented land would be from two to three shillings a year for as much land as an individual can cultivate with his own hands.

MANURE is generally used in raising rice and potatoes. It is seldom purchased, the dung and litter of the cattle and other animals about the house being generally utilized for the purpose. For rice fields a little less than half a ton of manure, but for potatoes upwards of two tons, is required per acre. Manure, if purchased, would cost from 2s. 7½d. to 3s. 9d. per acre for rice land, and for potato fields from 12s. to 18s. per acre.

IRRIGATION for agricultural purposes is regularly practised. Water is brought to the land by means of channels cut from the numerous hill streams in the neighbourhood of the fields. Wells and tanks are unknown. The work of irrigation by means of these channels is very easily carried on, and at a very trifling outlay. Rotation of crops is not practised in the Hills.

MODEL FARM.—The Shillong Model Farm, established in 1873, has not proved a success. Experiments tried with wheat give some hope that cold-weather crops may profitably be introduced into the Hills. Two new varieties of potato—'red roughs' and 'pheasant's eye'—were successfully introduced in 1873-74; but these are not looked upon favourably by the Khásiás, as they only give one crop in the year, whereas the ordinary variety yields two crops. Several fruit-trees have been planted out, including apple, pear, cherry, nectarine, and plum; and the tables of the European residents are supplied with vegetables from the garden attached to the farm. A *Manual of Potato Cultivation* compiled by the superintendent has been translated into Assamese, and copies have been distributed among the adjoining Hill tribes. The general failure in all the agricultural experiments is attributed partly to the unfitness of the soil, and still more to the ravages of white ants and other insects peculiar to the Hills. The attempts to improve the indigenous breeds of live stock have been equally unfortunate. During the two years 1874-76 the sum of Rs. 1744

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731 pre-eminently filthy villages on the Cherrá Púnjí plateau the epidemic appears to have found a fitting home, for it stayed among them for a period of nine weeks and a half. The civil surgeon reports the deaths at Cherrá Púnjí and the surrounding villages to have amounted to about 175 out of a total of 232 cases. During the year 1876-77 hooping-cough and small-pox were prevalent in an epidemic form. In the Jáintiá Hills small-pox is stated to have caused 47 deaths, chiefly during the months of June, July, and August. Some fatal cases of hooping-cough occurred among the Khási children in the village of Máokhar, near Shillong. The only two cases of cholera reported were in the Jáintiá Hills.

16 VITAL STATISTICS.—A general system of registration is not [659] attempted throughout the Khásí and Jáintiá Hills District. Statistics [648] of births and deaths are only collected among the inhabitants of the Stations of Shillong and Cherrá Púnjí, and in the selected area in the vicinity of Jowái, which comprises the following seven villages:—Jowái, Nongbah, Nartiang, Mynsau, Amwí, Ralliang, and Shampúng. This selected area has a population of 12,504. Each village forms a distinctly-circumscribed community, in which the statistics are readily ascertained and reported by the *dolloi* or head-man. The returns may be regarded as extremely close to the truth, both for births and deaths; and they thus furnish an approximate statement of the health of the entire Hills. In 1874 the total number of deaths in the selected area was 351, showing a death rate of 28 per thousand; the number of births was 431, or 34·4 per thousand. The total population of all the places in which vital statistics are collected is 15,458 persons, among whom 428 deaths were recorded in 1874, showing a death-rate of 27·6 per thousand, as compared with 27·3 per thousand in the preceding year. The deaths were thus distributed—24 from cholera, 296 from fever, 38 from bowel complaints, 2 from snake-bite or wild beasts, and 68 from all other causes. The mortality from fevers was the highest recorded throughout the entire Province. On this the civil surgeon observes:—'There are few local sources of malaria in the Hills. Many of the deaths from fever were probably due to typhoid, induced by the use of impure water and by the filthy state in which the people live. There is no attempt at conservancy in a Khásí village. In Jowái, a good specimen of the class, the lanes and pathways are strewn with excrement and house refuse. Drinking water is got from wells in the heart of the village, fed by the drainage of the

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surface soil of the hills upon which the houses are built.' Cholera is attributed to importation from the plains.

SANITATION.—It has already been stated that the ordinary Khási villages are absolutely destitute of any conservancy arrangements. The sanitary condition, however, of the Station of Shillong is described as 'good.' The natural drainage is excellent. Drinking water is obtained chiefly from hill streams, and on the banks of these streams conservancy regulations are enforced. The water is conducted into the town by means of an artificial water-course. Public latrines have been erected at suitable places inside the town. The staff of sweepers and *beldárs* keeps the roads and drains clean, and the surface generally free from pollution. The sanitary condition of the cantonment is reported to be very good.

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CHARITABLE DISPENSARY.—There is one dispensary in the Khási and Jáintiá Hills—at the Station of Shillong. It was first opened in 1872, and considerable additions have since been made to the building. During 1874 a total sum of Rs. 775. 8, or £77, 11s., was expended on new constructions and repairs, towards which the European residents subscribed Rs. 329. There is now accommodation for 10 male and 3 female patients. In that year the total number of in-door patients treated was 44, of whom 9 died, giving a death-rate of 20·45 per cent. The number of out-door patients was 529, or an average daily attendance of 7·8. Of the grand total of patients of both classes, only 31 were females. The largest number of cases are classified under the headings of fevers and constipation and colic. The total income during the year was Rs. 1598. 13. 9, or £159, 17s. 8d., of which Government contributed Rs. 300 for salaries, and an additional Rs. 300 as a special allowance. The European subscriptions amounted to Rs. 869, as compared with Rs. 33 subscribed by natives. The total expenditure was Rs. 1187. 15. 6, or £118, 16s., leaving a balance in hand of Rs. 410. 14. 3. The chief items were Rs. 480 for salaries of medical subordinates, Rs. 160 for servants' wages, and Rs. 222 for dieting of sick. There were 53 minor operations performed during the year.

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The people of the District have no system of medicine of their own, and no native practitioners. Their sole remedies consist in divination and incantation. The only indigenous native drugs are chireta and wormwood. As stated in a previous paragraph, a small cinchona plantation was established by Government at Nongklao in 1867.

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